

AMENDMENTS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1.-108. (Canceled)

109. (Currently amended) An isolated antigen-binding protein that inhibits the binding to a hepatic stem cell of detector of a cell type which identifies on the cell type a cell marker, wherein the cell marker is capable of binding to a GCTM-5 antibody that is produced by a hybridoma having ECACC accession number 03101603.

110. (Currently amended) The detector antigen-binding protein according to claim 109 which is an antibody, portion or fragment or equivalent thereof, ligand or complementary complimentary molecule to the hepatic stem cell GCTM-5 epitope cell marker.

111. (Currently amended) The detector antigen-binding protein according to claim 109 which is an antibody, a portion or fragment or equivalent thereof that recognizes the GCTM-5 epitope.

112. (Currently amended) The detector antigen-binding protein according to claim 109 which is a GCTM-5 antibody or an antigen-binding portion active fragment thereof.

113. (Cancel) The detector according to claim 109 which can compete against a GCTM-5 antibody for binding, wherein the GCTM-5 antibody is produced by a hybridoma having ECACC accession number 03101603.

114. (Canceled)

115. (Cancel) The detector according to claim 109 which detects the cell marker on a stem cell.

116. (Cancel) The detector according to claim 109 which detects the cell marker on a sub population of stem cells.

117. (Currently amended) The detector antigen-binding protein according to claim 109 wherein the hepatic stem cell [[type]] is selected from the group consisting of: a hepatoblast; a hepatic

stem cell; a hepatic progenitor cell; a pancreatic stem cell; a pancreatic progenitor cell; a hepatic cancer cell; and a pancreatic cancer cell.

118. (Currently amended) The ~~detector~~ antigen-binding protein according to claim 115 wherein the hepatic stem cell is a cell of the biliary epithelium.

119. (Currently amended) The ~~detector~~ antigen-binding protein according to claim 115 wherein the stem cell is proliferating.

120. (Currently amended) [[A]] An isolated hybridoma which that produces an antibody which competes for binding with ~~to a cell marker~~, wherein the ~~cell marker~~ is capable of binding to a GCTM-5 antibody, produced by a hybridoma having ECACC accession number 03101603, for binding to a hepatic stem cell.

121. (Currently amended) A hybridoma that ~~which~~ produces a GCTM-5 antibody of ECACC accession number 03101603, ~~or fragment thereof~~.

122.-169. (Canceled)

170. (Currently amended) A kit for detecting a cell marker, said kit comprising a ~~detector~~ the antigen binding protein according to claim 109 which is capable of detecting ~~the cell marker on the cell~~ a hepatic stem cell.

171. (Cancel) ~~The kit according to claim 170, wherein the detector is capable of detecting a cell marker on a subpopulation of stem cells or in a biological sample.~~

172. (Currently amended) The kit according to claim 170, wherein the ~~detector~~ antigen binding protein is capable of detecting the hepatic stem cell GCTM-5 epitope ~~cell marker~~ on a cell selected from the group consisting of: a hepatoblast; a hepatic stem cell; a hepatic progenitor cell; a pancreatic stem cell; a pancreatic progenitor cell; a biliary cell; a biliary epithelial cell; a hepatic cancer cell; and a pancreatic cancer cell.

173. (Currently amended) The kit according to claim 170, wherein the ~~detector~~ antigen binding protein is capable of detecting the hepatic stem cell GCTM-5 epitope ~~cell marker~~ on a cell that is proliferating.

174. (Currently amended) The kit according to claim 170, wherein the detector antigen binding protein is capable of detecting the hepatic stem cell GCTM-5 epitope cell marker in a biological sample including cell culture, tissue culture, conditioned medium, tissue sample, blood, serum, plasma and other bodily fluids and biopsy samples.

175. (Currently amended) The kit according to claim 170 wherein the detector antigen binding protein is a GCTM-5 antibody produced by a hybridoma having ECACC accession number 03101603, or active portion or fragment thereof.

176. (Canceled)

177. (Currently amended) A kit for isolating a subpopulation of stem cells, said kit comprising a detector the antigen binding protein according to claim 109 for detecting cells expressing a marker on the cell a GCTM-5 epitope, and a means to separate the cells detected by the detector antigen binding protein.

178. (Currently amended) The kit according to claim 177 for isolating a hepatic stem cell selected from the group consisting of: a hepatoblast; a hepatic stem cell; a hepatic progenitor cell; a pancreatic stem cell; and a pancreatic progenitor cell.

179. (Currently amended) The kit according to claim 177 for isolating a [[stem]] hepatic stem cell that is proliferating.

180. (Currently amended) The kit according to claim 177 for isolating a hepatic stem cell from a biological sample including cell culture, tissue culture, conditioned medium, tissue sample, blood, serum, plasma and other bodily fluids and biopsy samples.

181. (Currently amended) The kit according to claim 177 wherein the detector antigen binding protein is a GCTM-5 antibody produced by a hybridoma having ECACC accession number 03101603, or active portion or fragment thereof.

182. (Canceled)